

FORM PTO-1390	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEY'S DOCKET NUMBER
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371		1522.1004
INTERNATIONAL APPLICATION NO. PCT/KR00/00541	INTERNATIONAL FILING DATE 26 May, 2000	PRIORITY DATE CLAIMED 27 May, 1999
TITLE OF INVENTION ADVERTISING SYSTEM AND METHOD USING INTERNET WEB BROWSER		
APPLICANT(S) FOR DO/EO/US Jin-Yong JOO and Eun-Gu KIM		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
<p>1. [X] This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.</p> <p>2. [X] This is an express request to immediately begin national examination procedures (35 U.S.C. 371(f)).</p> <p>3. [] The US has been elected by the expiration of 19 months from the priority date (PCT Article 31).</p> <p>4. [X] A copy of the International Application as filed (35 U.S.C. 371(c)(2))</p> <ul style="list-style-type: none"> a. [] is transmitted herewith (required only if not transmitted by the International Bureau). b. [X] has been transmitted by the International Bureau. c. [] is not required, as the application was filed in the United States Receiving Office (RO/US). <p>5. [] A translation of the International Application into English (35 U.S.C. 371(c)(2)).</p> <p>6. [] Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))</p> <ul style="list-style-type: none"> a. [] are transmitted herewith (required only if not transmitted by the International Bureau). b. [] have been transmitted by the International Bureau. c. [] is not required, as the application was filed in the United States Receiving Office (RO/US) <p>7. [] A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</p> <p>8. [] An oath or declaration of the inventor (35 U.S.C. 371(c)(4)).</p> <p>9. [] A translation of the Annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</p>		
Items 10-15 below concern document(s) or information included:		
<p>10. [] An Information Disclosure Statement Under 37 CFR 1.97 and 1.98.</p> <p>11. [] An assignment document for recording.</p> <p style="margin-left: 20px;">Please mail the recorded assignment document to:</p> <ul style="list-style-type: none"> a. [] the person whose signature, name & address appears at the bottom of this document. b. [] the following: <p>12. [X] A preliminary amendment.</p> <p>13. [] A substitute specification</p> <p>14. [] A change of power of attorney and/or address letter.</p> <p>15. [X] Other items or information: PCT/ISA/210</p>		

091763144

2. [X] The U.S. National Fee (35 U.S.C. 371(c)(1)) and other fees as follows:

JC02 Rec'd PCT/PTO 20 FEB 2001

CLAIMS	(1) FOR	(2) NUMBER FILED	(3) NUMBER EXTRA	(4) RATE	(5) CALCULATIONS
	TOTAL CLAIMS	11	-20=	0	x \$ 18.00 0.00
	INDEPENDENT CLAIMS	4	-3=	1	x \$ 80.00 80.00
	MULTIPLE DEPENDENT CLAIM(S) (if applicable)				+\$270.00 0.00
BASIC NATIONAL FEE (37 CFR 1.492(a)(1)-(4):					
	[X] Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO	\$ 1,000			1000.00
	[] International preliminary examination fee (37 C.F.R. 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO..	\$ 860			
	[] International preliminary examination fee (37 C.F.R. 1.482) not paid to USPTO but international search fee (37 C.F.R. 1.445(a)(2)) paid to USPTO.....	\$ 710			
	[] International preliminary examination fee paid to USPTO (37 CFR 1.482) but all claims did not satisfy provision of PCT Article 33(1)-(4).....	\$ 690			
	[] International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(2) to (4)	\$ 100			
	Surcharge of \$130 for furnishing the National fee or oath or declaration later than [] 20 [X] 30 mos. from the earliest claimed priority date (37 CFR 1.482(e)).				130.00
				TOTAL OF ABOVE CALCULATIONS	0.00
	Reduction by 1/2 for filing by small entity, if applicable. Affidavit must be filed also. (Note 37 CFR 1.9, 1.27, 1.28.)				
				SUBTOTAL	0.00
	Processing fee of \$130 for furnishing the English Translation later than [] 20 [X] 30 mos. from the earliest claimed priority date (37 CFR 1.482(f)).				1210.00
				TOTAL NATIONAL FEE	1,210.00
	Fee for recording the enclosed assignment (37 CFR 1.21(h)).				+
				TOTAL FEES ENCLOSED	1,210.00

a. [X] A check in the amount of \$1,210.00 to cover the above fees is enclosed.
 b. [] Please charge my Deposit Account No. 19-3935 in the Amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed.
 c. [X] The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 19-3935. A duplicate copy of this sheet is enclosed.



21171

PATENT TRADEMARK OFFICE

4/16/2001

DATE

James D. Halsey, Jr.

REGISTRATION NO. 22,729

Docket No. 1522.1004 (JDH)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Jin-Yong JOO, et al.

Serial No.: To be assigned

Group Art Unit: Unassigned

Filed: February 16, 2001

Examiner: Unassigned

For: ADVERTISING SYSTEM AND METHOD USING INTERNET WEB
BROWSER**PRELIMINARY AMENDMENT**Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Before examination of the above-identified application, please amend the application as follows:

IN THE CLAIMS:

Please AMEND the claims as follows:

Claim 5,

lines 1 and 2, change "3 or 4" to --3--.

Claim 6,

line 1, change "one of claims 1, 2, 3 and 4" to --claim 1--.

Claim 7,

line 1, change "one of claims 1, 2, 3 and 4" to --claim 1--.

Claim 10,

line 1, change "1 or 2" to --1--.

IN THE ABSTRACT

Please INSERT the attached Abstract after page 18 of the claims.

REMARKS

This Preliminary Amendment is submitted to improve the form of the claims as originally-filed.

It is respectfully requested that this Preliminary Amendment be entered in the above-referenced application.

If any further fees are required in connection with the filing of this Preliminary Amendment, please charge same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: February 16, 2001

By: _____
James D. Halsey, Jr.
Registration No. 22,729

700 Eleventh Street, N.W., Suite 500
Washington, D.C. 20001
(202) 434-1500

ADVERTISING SYSTEM AND METHOD USING INTERNET WEBBROWSERBACKGROUND OF THE INVENTION1. Field of the Invention

5 The present invention relates to an advertising system and method using a web browser serving as an Internet surfing tool, specifically, to an advertising system and method using an Internet web browser, in which one of a menu bar, location bar, tool bar, etc. in the screen of the web browser, that is not used for displaying information from a server, is used for displaying advertisements during a period of time for which
10 function commands are not inputted, thereby improving effectiveness of advertisement.

2. Description of the Related Art

With the popularization of the Internet, web browsers used for Internet surfing are installed in almost all computers. The web browser is a kind of program which converts contents transmitted from a server computer into a form that users can
15 visually recognize according to a communication protocol (HTML) to display the converted form on the computer monitors of the users.

Due to free charge on Internet information service, most of servers providing information advertise manufacturing and sales companies instead of charging on their clients, to thereby make a profit. That is, most of information providers display an
20 advertisement of a specific company in a part of a web browser when clients access a server computer, and collect advertising rates from the company for that advertisement.

In conventional advertisements using the web browsers, however, advertising logos or phrases are displayed in a part of a web browser's text window used for displaying information stored in the server. This reduces the amount of information

displayed on the screen of computer monitors and gives bad images to the clients. Especially, some clients have an aversion to advertisements displayed in the text window and even disconnect with the server. Accordingly, advertising impact is reduced.

5

SUMMARY OF THE INVENTION

It is, therefore, an object of the present invention to provide an advertising system and method using a web browser, which uses a menu bar, location bar, tool bar or status line in the screen of the web browser, that is not used for displaying texts, for displaying advertisements during a period of time for which function commands are 10 not inputted from users, thereby improving effectiveness of advertisement.

Another object of the present invention is to provide an advertising system and method using a web browser, in which advertisements are not displayed in the screen of the web browser used for displaying information transmitted from a server computer to increase the amount of information displayed on the screen, providing a 15 large quantity of information.

To accomplish the objects of the present invention, there is provided an advertising method using a web browser, in which a moving state of a cursor is detected when a web browser is activated to be displayed, an advertising logo or phrase is displayed at a portion above a text box when it is detected that the cursor is 20 not positioned at a command input box such as menu bar, tool bar, location bar, etc., and a corresponding command input box at which the cursor is located is displayed to receive a control signal from a user when it is detected that the cursor is placed at one of the menu bar, tool bar, location bar, etc.. A period of time consumed for using the web browser is measured for each client, to pay clients for using the web browser on

which advertisements are displayed or to bestow a favor of free Internet subscription or free services on the clients, to thereby increase effectiveness of advertisement.

An advertising method using a web browser is constructed in such a manner that a moving state of a cursor 60 is detected when a web browser 10 is activated to be displayed, an advertising logo or phrase is displayed at a portion above a text box when it is detected that the cursor 60 is not positioned at a command input box such as menu bar 20, tool bar 30, location bar 40, etc., and a corresponding command input box at which the cursor 60 is located is displayed to receive a control signal from a user when it is detected that the cursor 60 is placed at one of the menu bar 20, tool bar 10 30, location bar 40, etc..

Upon the user subscribing to an advertisement agency, a period of time consumed for using the Internet is measured in such a manner that a web browser program informs the advertisement agency of the user's ID and a period of time consumed for using the web browser when the user initially accesses the Internet and 15 also notifies the agency of a point of time when using of the web browser is finished, and the advertisement agency accumulates the period of time during which the user has used the web browser while using the Internet to monthly pay an amount of money in proportion to the period of time used on the account of the user.

To accomplish the objects of the present invention, there is provided an 20 advertising system using a web browser, which employs an a client PC, a server and an open network connecting the client PC and the server to each other, in which the client PC has a web browser which detects the movement of a mouse cursor displayed on its monitor and, when the cursor is located in a text box thereof, displays an advertisement screen on at least one of the menu bar, tool bar, location bar and logo

thereof.

To accomplish the objects of the present invention, there is also provided an advertising system using a web browser, which employs an a client PC, a server and an open network connecting the client PC and the server to each other, the client PC
5 having: a web browser connecting it to the open network; and an auxiliary program which detects the movement of a mouse cursor displayed on its monitor and, when the cursor is located in a text box of the web browser, displays an advertising screen on at least one of the menu bar, tool bar, location bar and logo of the web browser.

The server stores a plurality of advertisement screens and transmits a part of
10 them to the client PC at the request of the client PC or at predetermined time intervals, the advertisement screen disappears when the cursor moves to portions other than a specific portion thereof, and the logo is a unique symbol of a specific web browser producing company.

To accomplish the objects of the present invention, there is provided an
15 advertising method using a web browser, which employs an a client PC, a server and an open network connecting the client PC and the server to each other, the advertising method comprising: an operation detecting step of detecting that the web browser is activated in the client PC; an advertisement display step of displaying an advertisement screen on at least one of a menu bar, a tool bar, a location bar and a logo of the web
20 browser when the web browser is being activated and a mouse cursor is positioned in a text box of the web browser; and a menu display step of displaying a menu screen not the advertisement screen when the web browser is being activated and the mouse cursor is positioned on at least of the menu bar, the tool bar, the location bar and the logo of the web browser.

The advertising method further comprises an advertisement updating step of receiving the advertisement screen from the server at the request of the client PC or at predetermined time intervals.

The server checks a period of time consumed for the client PC to use the web browser to pay an amount of money in proportion to the checked period of time to a user of the client PC, and the period of time corresponds to the duration for which the advertisement screen is displayed on the web browser.

According to the present invention, the menu bar, location bar or tool bar in the screen of the web browser, that is not used for displaying information from a server, is 10 used for displaying advertisements during a period of time for which function commands are not inputted from users, thereby improving effectiveness of advertisement. In addition, with the increase in the amount of information displayed in the text box of the web browser, users can acquire a larger quantity of information for a short period of time.

15

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 shows the screen of a conventional web browser;

FIG. 2 shows the screen of a web browser on which an advertising logo is displayed according to an embodiment of the present invention;

FIG. 3 shows the screen of a web browser on which an advertising logo is 20 displayed according to another embodiment of the present invention; and

FIG. 4 is a flow chart showing an advertising method according to the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The advertising system and method using a web browser according to the

present invention is explained below with reference to the attached drawings.

The present invention provides the advertising system and method using function display windows of the screen of a web browser which are not used for displaying information from a server. When a web browser 10 is activated to be displayed on a user's computer monitor, a moving state of a cursor 60 is detected. When it is detected that the cursor 60 is not positioned at a command input box such as menu bar 20, tool bar 30 or location bar 40, an advertising logo or phrase is displayed at the portion above a text box 50. On the other hand, when it is detected that the cursor 60 is located at one of the menu bar 20, tool bar 30 and location bar 40, a corresponding command input box at which the cursor 60 is positioned is displayed to receive a control signal from the user.

A navigator web browser 10 of Netscape is explained with reference to FIG. 1. Upon activation of the web browser 10, a menu bar 10, tool bar 30, location bar 40, etc. are displayed at the upper portion of the screen of a monitor, a text box 50 is displayed at its lower portion and a status line 80 is displayed at its bottom. A personal tool bar is omitted for convenience of explanation.

The menu bar 20 has submenus such as "File", "Edit", "View", "Go", "Communicator" and "Help". With clicking on a submenu with the cursor 60, the corresponding submenu is displayed in the pull-down mode. When a user clicks on a desired menu using the cursor 60, a screen based on the designated menu is displayed on the monitor so that the user can execute the function.

The tool bar 30, positioned below the menu bar 20, has subfunctions such as "Back", "Forward", "Reload", "Home", "Search", "Guide", "Print", "Security" and "Stop". That is, the tool bar 30 is an additional tool box containing functions, being

frequently used, among the menus. The location bar 40 has functions of "Bookmarks" and "Netsite". The location bar 40 displays the uniform resource location (URL) of a accessed site and is constructed in such a manner that an address is inputted to access a desired site.

5 The text box 50, positioned under the location bar 40, displays information transmitted from the server. The above-described conventional web browser 10 displays the menu bar 20, tool bar 30 and location bar 40 all the time without regard to the contents of the text box 50.

In the present invention, an advertising logo 70 is displayed instead of the
10 menu bar 20, tool bar 30 and location bar 40, as shown in FIG. 2. This advertising logo 70 may be previously inputted by a web browser producing company when the program is constructed. Otherwise, the advertisement may be made using an auxiliary program which displays the advertising logo 70 instead of the menu bar 20, tool bar 30 and location bar 40. Furthermore, the specific advertising logo 70 displayed in the web
15 browser 10 can be constructed in such a manner that it is updated with other advertisements through the Internet. This is accomplished by conventional techniques. Moreover, the advertising logo 70 can be inserted using a separate external program.

When the user operates the web browser 10, a web browser program loaded in
a computer memory detects the location of the cursor 60. When it is detected that the
20 cursor 60 is placed in the text box 50, it is judged that the user is reading the contents of a text, displaying the predetermined advertising logo 70 at the position of the menu bar 20, tool bar 30 and location bar 40. On the other hand, when the cursor 60 is positioned on one of the menu bar 20, tool bar 30 and location bar 40, they are displayed to allow the user to input a command for executing a specific function, as

shown in FIG. 1.

Accordingly, the user can output a larger amount of information than in the conventional case where advertisements are displayed in the text box 50. This improves the images of advertisements. In addition, a larger quantity of information
5 can be displayed in the text box 50 without impeding the operation of the web browser
10.

Though the advertising logo is displayed on the upper portion of the screen of the web browser 10 including the menu bar 20, tool bar 30, location bar 40, etc. in the aforementioned embodiment, it is obvious that advertisements in the form of logo or
10 phrase can be displayed on the status line 80 displaying "security display", "receiving status indicator", "component bar", etc., being located under the text box 50.

FIG. 3 illustrates another embodiment which uses a box where a logo 32 of the web browser company is displayed instead of the menu bar 20, tool bar 30 and location bar 40 for advertising. The conventional web browser 10 employs a method
15 operating the logo 32 for indicating the standby state during data transmission/reception for transfer to other screens or sites while accessing the Internet. For example, a logo representing a shower of stars operates in the web browser of Netscape. Co. while a logo representing a revolving globe operates in the web browser of Microsoft. Co. As described above, the web browser company's logo is replaced
20 with the logo of a specific company for advertising, gaining advertising impact. In this case, only the logo 34 may be used for advertising while the menu bar 20, tool bar 30 and location bar 40 are normally displayed, or all of the logo 34, menu bar 20, tool bar 30 and location bar 40 may be used for advertising simultaneously.

For the purpose of executing the advertising method of the present invention

more effectively, clients using the web browser according to the present invention are registered and a period of time consumed for using the web browser is measured for each client, to pay them for using the web browser in proportion to the period of time or to bestow a favor of free Internet subscription or free services on the clients, to 5 thereby increase the number of users.

Specifically, in case where a user carries out Internet surfing using a web browser to which the advertising method of the present invention is applied, upon the user subscribing to a web browser producing company or advertisement agency, a period of time consumed for using the Internet is measured in such a manner that the 10 web browser program informs the company to which the user subscribes of the user's ID and a period of time consumed for using the web browser when the Internet is initially accessed and also notifies the company of a point of time when using of the web browser is finished.

A corresponding advertisement agency can increase the number of users by 15 using a method that accumulates the period of time during which the user has used the web browser while using the Internet to monthly pay an amount of money in proportion to the period of time used on the account of the corresponding user. Furthermore, with the increase in the number of users, it is possible to collect a larger 20 quantity of advertising rates from companies displaying their advertisements in the web browser. Here, the period of time consumed for using the web browser is calculated only when the user has accessed the Internet, not measured when using the web browser off-line.

While certain embodiments and details have been shown for the purpose of illustrating the present invention, it will be apparent to those skilled in the art that

various changes and modifications may be made herein without departing from the spirit or scope of the invention.

WHAT IS CLAIMED IS:

1. An advertising method using a web browser,
wherein, a moving state of a cursor is detected when a web browser is activated
5 to be displayed, an advertising logo or phrase is displayed at a portion above a text box
when it is detected that the cursor is not positioned at a command input box such as
menu bar, tool bar, location bar, etc., and a corresponding command input box at
which the cursor is located is displayed to receive a control signal from a user when it
is detected that the cursor is placed at one of the menu bar, tool bar, location bar, etc..
10
2. The advertising method using a web browser as claimed in claim 1,
wherein, upon the user subscribing to an advertisement agency, a period of time
consumed for using the Internet is measured in such a manner that a web browser
program informs the advertisement agency of the user's ID and a period of time
15 consumed for using the web browser when the user initially accesses the Internet and
also notifies the agency of a point of time when using of the web browser is finished,
and the advertisement agency accumulates the period of time during which the user
has used the web browser while using the Internet to monthly pay an amount of money
in proportion to the period of time used on the account of the user.
20
3. An advertising system using a web browser, which employs an a client
PC, a server and an open network connecting the client PC and the server to each other,
wherein the client PC has a web browser which detects the movement of a
mouse cursor displayed on its monitor and, when the cursor is located in a text box

thereof, displays an advertisement screen on at least one of the menu bar, tool bar, location bar and logo thereof.

4. An advertising system using a web browser, which employs an a client
5 PC, a server and an open network connecting the client PC and the server to each other,

the client PC having:

a web browser connecting it to the open network; and

an auxiliary program which detects the movement of a mouse cursor displayed
on its monitor and, when the cursor is located in a text box of the web browser, displays
10 an advertising screen on at least one of the menu bar, tool bar, location bar and logo of
the web browser.

5. The advertising system using a web browser as claimed in claim 3 or
4, wherein the server stores a plurality of advertisement screens and transmits a part of
15 them to the client PC at the request of the client PC or at predetermined time intervals.

6. The advertising system using a web browser as claimed in claim 3 or
4, wherein the advertisement screen disappears when the cursor moves to portions other
than a specific portion thereof.

20

7. The advertising system using a web browser as claimed in claim 3 or
4, wherein the logo is a unique symbol of a specific web browser producing company.

8. An advertising method using a web browser, which employs an a

client PC, a server and an open network connecting the client PC and the server to each other, the advertising method comprising:

an operation detecting step of detecting that the web browser is activated in the client PC;

5 an advertisement display step of displaying an advertisement screen on at least one of a menu bar, a tool bar, a location bar and a logo of the web browser when the web browser is being activated and a mouse cursor is positioned in a text box of the web browser; and

a menu display step of displaying a menu screen not the advertisement screen
10 when the web browser is being activated and the mouse cursor is positioned on at least of the menu bar, the tool bar, the location bar and the logo of the web browser.

9. The advertising method using a web browser as claimed in claim 8,
further comprising an advertisement updating step of receiving the advertisement screen
15 from the server at the request of the client PC or at predetermined time intervals.

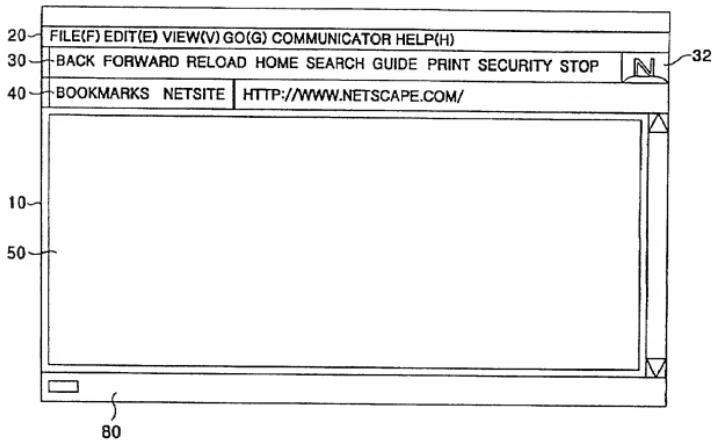
10. The advertising method using a web browser as claimed in claim 8 or
9, wherein the server checks a period of time consumed for the client PC to use the web browser to pay an amount of money in proportion to the checked period of time to a
20 user of the client PC.

11. The advertising method using a web browser as claimed in claim 10,
wherein the period of time corresponds to the duration for which the advertisement screen is displayed on the web browser.

--ABSTRACT

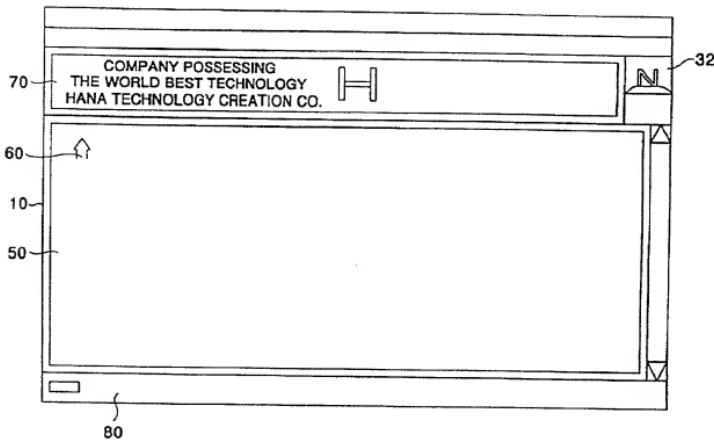
There is provided an advertising system and method using an Internet web browser, in which one of a menu bar, location bar, tool bar, etc. in the screen of the web browser, that is not used for displaying information from a server, is used for displaying advertisements, during a period of time for which function commands are not inputted, thereby improving effectiveness of advertisement. The advertising method using a web browser is constructed in such a manner that a moving state of a cursor is detected when a web browser is activated to be displayed, an advertising logo or phase is displayed at a portion above a text box when it is detected that the cursor is not positioned at a command input box such as menu bar, tool bar, location bar, etc., and a corresponding command input bot at which the cursor is located is displayed to receive a control signal from a user when it is detected that the cursor is placed at one of the menu bar, tool bar, location bar, etc.--

FIG. 1



2/4

FIG. 2



3/4

FIG. 3

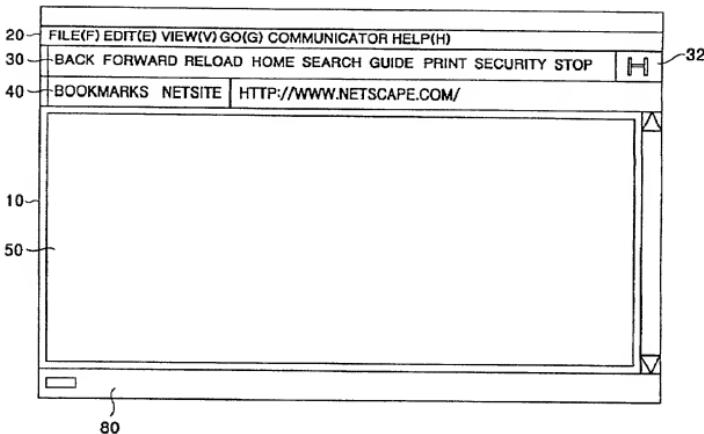
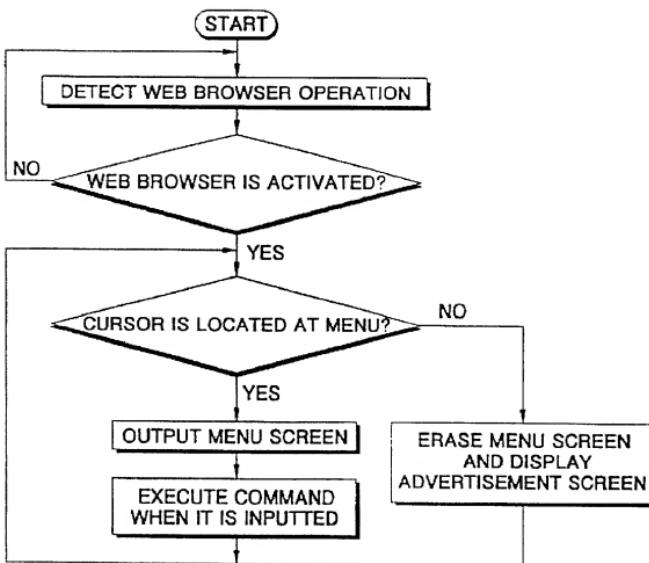


FIG. 4





UNITED STATES

Docket No.:

COMBINED DECLARATION/POWER OF ATTORNEY FOR UTILITY/DESIGN PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

ADVERTISING SYSTEM AND METHOD USING INTERNET WEB BROWSER

the specification of which is attached hereto, unless the following box is checked:

was filed on 26/May/2000 as United States Application Number or PCT International Application Number PCT/KR00/00541 and was amended on (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim foreign priority benefit(s) under 35 U.S.C. § 119(e)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application(s) for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

Priority Not Claimed

1999/19320

Republic of Korea

27/May/1999

(Number)

(Country)

Day/Month/Year Filed



(Number)

(Country)

Day/Month/Year Filed



I hereby claim the benefit under 35 U.S.C. § 120 or § 119(e) of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application(s) in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

PCT/KR00/00541

29/March/2000

pending

(Application Serial No.)

(Filing Date)

(Status -- patented, pending, abandoned)

(Application Serial No.)

(Filing Date)

(Status -- patented, pending, abandoned)

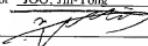
I hereby appoint the attorneys and agents of Stas & Halsey LLP under USPTO Customer No. 21,171 to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:



21171

PATENT TRADEMARK OFFICE

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor JOO, Jin-YongInventor's Signature Date 12/February/2001Residence 201 Arvilla 586 Yangji-dong, Sujeong-ku, Seongnam-city, Kyonggi-do 461-250 Republic of Korea Citizenship Republic of KoreaPost Office Address same as above

Full name of second joint inventor, if any _____

Second Inventor's Signature _____ Date _____

Residence _____ Citizenship _____

Post Office Address _____

 Additional inventors are being named on separately numbered sheets attached hereto.